# THE UNITED STATES PATENT AND TRADEMARK OFFICE BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Appeal No: Unassigned

Te application of:

CHIKAZAWA, Nagahisa et al.

Group Art Unit: 2623

Serial Number:

09/811,526

Examiner: LAROSE, Colin M

Filed:

March 20, 2001

Confirmation No.: 9425

For:

FINGERPRINT RECOGNIZING APPARATUS AND INFORMATION PROCESSING UNIT HAVING SUCH APPARATUS

Customer No.

38834

Atty. Docket No. 010363

### APPEAL BRIEF

Mail Stop Appeal Brief-Patents Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

September 27, 2005

Sir:

Applicants appeal the January 25, 2005 rejection of claims 1-15.

Applicants (now referred to hereinbelow as "appellants") filed a Notice of Appeal on June 27, 2005.

### I. REAL PARTY IN INTEREST

The real party in interest is the assignee of the subject application, which is:

### **FUJITSU LIMITED**

1-1, Kamikodanaka 4-Chome Nakahara-ku, Kawasaki-shi, Kanagawa 211-8588 Japan

# II. RELATED APPEALS AND INTERFERENCES

Appellants know of no other appeals or interference proceedings related to the present appeal.

### III. STATUS OF CLAIMS

Pending claims 1-15 stand rejected. No claims are allowed or objected to. The claims on appeal are claims 1-15.

### IV. STATUS OF AMENDMENTS

No amendments were filed subsequent to the Final Rejection.

### V. SUMMARY OF CLAIMED SUBJECT MATTER

Aspects of the claimed invention include: a fingerprint recognizing apparatus; an electrical unit including a fingerprint recognizing apparatus; and an information processing unit including a fingerprint recognizing apparatus.

With respect to claims 1-6, an embodiment of the disclosed fingerprint recognizing apparatus includes: a sensor section (see, e.g., element 7 in Fig. 1), a cover (see, e.g., element 30 in Fig. 1), and a contact section (see, e.g., element 23 in amended Fig. 1). The sensor section is mounted on the apparatus body for detecting a fingerprint of an operator. The cover is movable between an open position and a closed position for protecting the sensor section in such a manner that an operator's finger can access the sensor section when the cover is in the open position. The contact section is arranged on the apparatus body at a position where the operator's finger

can easily come into contact therewith during an operator's action to open the cover, and the contact section is electrically connected to the ground of the apparatus body.

With respect to claims 7-14, an embodiment of the disclosed electrical unit includes: a unit casing and a fingerprint recognizing apparatus mounted on the unit casing. The fingerprint recognizing apparatus has a sensor section, a cover, and a contact section.

With respect to claim 15, an embodiment of the disclosed information processing unit includes: a unit body, a display section, and a fingerprint recognizing apparatus mounted on the unit casing. The fingerprint recognizing apparatus has a sensor section, a cover, and a contact section. The contact section is electrically connected to the ground of the unit casing.

Additionally, with respect to claims 1, 2, 7, 8, and 14, embodiments of the disclosed invention include the feature that the contact section is a separate element from the cover. (See, e.g., Fig. 1.)

Also, with respect to claims 3 and 9-11, embodiments of the disclosed invention include the feature that the contact section is arranged in a recess. (See, *e.g.*, page 10, lines 18-20.)

# VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

Appellants appeal the following rejections:

- (1) The rejection of claims 1-5, 7-11, 13, and 14 under 35 U.S.C. § 103(a) as obvious over Bradney et al. (U.S. Pat. No. 6,208,264) in view of Setlak et al. (U.S. Pat. No. 5,940,526);
- (2) The rejection of claims 6 and 12 under 35 U.S.C. § 103(a) as obvious over Bradney et al. in view of Setlak et al., and further in view of Gainey (U.S. Pat. No. 6,382,416); and

(3) The rejection of claim 15 under 35 U.S.C. § 103(a) as obvious over Holehan (U.S. Pat. No. 6,337,918) in view of Setlak et al.

### VII. ARGUMENTS

Appellants explain herein why the obviousness rejections should be reversed.

A. The rejection of claims 1-5, 7-11, 13, and 14 under 35 U.S.C. § 103(a) as obvious over Bradney et al. (U.S. Pat. No. 6,208,264) in view of Setlak et al. (U.S. Pat. No. 5,940,526) should be reversed.

The following argument applies to claims 1-5, 7-11, 13, and 14 as a group:

The rejection relies on Bradney et al. as the primary reference and on Setlak et al. as the secondary reference. More specifically, the rejection relies on Setlak et al. to suggest modifying the disclosed technology of Bradney et al. to have every element recited in the claims. Bradney et al. discloses a fingerprint recognizing apparatus that uses an *optical* fingerprint sensor, and Setlak et al. discloses a fingerprint recognizing apparatus that uses an *electric field* fingerprint sensor.

To establish a *prima facie* case of obviousness based on two prior art references, MPEP § 2143 requires that: (1) there must be some suggestion or motivation to modify the reference or to combine reference teachings; and (2) the modified prior art must teach or suggest all claim limitations. Appellants explain as follows why the rejection meets neither requirement.

The rejected claims specify that the fingerprint recognizing apparatus has a "contact section electrically connected to ground." The Examiner acknowledges that Bradney et al. does

not teach this feature. Accordingly, the rejection relies on Setlak et al. to suggest modifying the Bradney et al. fingerprint recognizing apparatus to have the quoted claim feature. The Office Action of January 25, 2005 describes (see paragraph No. 7 at the top of page 4) the modification as follows: in the Bradney et al. fingerprint recognizing apparatus, the entire optical fingerprint sensor of the Bradney et al. system is replaced with the electric field fingerprint sensor of Setlak et al. Although not clearly stated, the Office Action implies (in the next paragraph) that the modified Bradney et al. system would retain its original "flip-top cover housing" and "contact section." (Flip-top cover 86 is relied upon to teach the "cover," and the area of membrane 58 is relied upon to teach the "contact section.")

Appellants now explain why the Examiner does not fulfill either requirement quoted above from MPEP § 2143 to justify the obviousness rejection.

Regarding the first requirement, that there be some suggestion or motivation to modify the reference or to combine reference teachings, the Examiner does not provide a proper suggestion or motivation to modify the Bradney et al. fingerprint recognizing apparatus by replacing its optical fingerprint sensor elements with elements of the Setlak et al. electric field fingerprint sensor. Instead, for the suggestion or motivation, the Examiner discusses the prior art as follows:

According to statements in paragraph No. 9 of the Office Action, page 4, Setlak et al. supposedly discloses "advantages" over the optical fingerprint sensors, such as that of Bradney et al., and thereby motivates the modification of the Bradney et al. fingerprint recognizing apparatus as described in the Office Action. In particular, the Office Action cites a portion of

column 6<sup>1</sup> of the Setlak et al. disclosure, which states that the finger charge bleed means and power control means may be configured to conserve power and to provide ESD (electro-static discharge) protection.

However, the citation in column 6 is not a comparison of the Setlak et al. electric field fingerprint sensor with prior art optical fingerprint sensors as discussed back in the background section of the document (see column 1, lines 21-48). Also, unlike the statements in column 4, lines 66, through column 5, line 6, which specifically distinguish the Setlak et al. electric field fingerprint sensor from a typical optical fingerprint sensor,<sup>2</sup> the cited text of columns 6 describes an embodiment that is either a modification of or a more detailed description of the previously-described embodiment of the Setlak et al. electric field fingerprint sensor.

Thus, although the Examiner asserts on page 4 in paragraph No. 9 that the prior art suggests that power conservation and ESD protection would be the result of modifying the Bradney et al. fingerprint recognizing apparatus, the text relied upon to support that statement does *not* teach that the Setlak et al. electric field fingerprint sensor uses less power and protects more against ESD *than an optical fingerprint sensor* (such as the one used in Bradney et al.).

<sup>&</sup>lt;sup>1</sup> In the first Office Action, lines 55-58 of column 6 are cited. In the second Office Action, lines 50-55 are cited.

<sup>&</sup>lt;sup>2</sup> Although this text states that Setlak et al. electric field fingerprint sensor might be more reliable than an optical fingerprint sensor, the statement does not apply to the Bradney et al. optical fingerprint sensor for the following reason: The optical fingerprint sensor referred to by Setlak et al. could supposedly be deceived by a photograph of a fingerprint. (Column 5, lines 4-6.) However, *Bradney et al.* discloses an optical fingerprint sensor that includes a thin membrane 58 in which the operator depresses. A reflective surface on the underside of membrane 58 conforms to the thumbprint to provide a pattern for the sensor to read. (Column 5, lines 59-66.) A photograph of a fingerprint would not produce a ridge pattern on the underside of membrane 58 for the sensor to read. Therefore, the Setlak et al. statement regarding reliability does not apply to the Bradney et al. optical fingerprint sensor. (Appellants acknowledge that Bradney et al. teaches that membrane 58 is "preferabl[e]," which implies that a Bradney et al. optical fingerprint sensor may be built without the membrane. However, the Office Action provides no explanation of why one skilled in the art would want to replace all optical sensing elements of Bradney et al. with the electric field sensing elements of Setlak et al. instead of simply adding a membrane to avoid the deceptive use of a photograph.)

Therefore, the cited portion of column 6 of Setlak et al. would not have motivated the modification upon which the obviousness rejection relies.

Appellants acknowledge the statements in paragraph 10 (Office Action, pages 4-5) of how ESD might damage CCDs (although no prior art documentation is provided in support of these statements), and appellants also note in paragraph 11 (Office Action, page 5) the statement that the Bradney et al. apparatus does not use CCD technology. Therefore, there is no apparent purpose here for statements regarding ESD damage to CCDs. To justify the rejection, the PTO must explain why a modification of the *Bradney et al.* fingerprint recognizing apparatus would have been desirable. A reason to modify a fingerprint recognizing apparatus that uses CDD technology is irrelevant.

The Office Action continues in paragraph 11 stating that the Bradney et al. fingerprint recognizing apparatus would benefit from some form of ESD protection, because it would ensure that solid-state components in proximity to the finger are protected from damage. However, the Office Action does not identify any solid-state components that are supposedly part of the Bradney et al. fingerprint recognizing apparatus. Because the rejection is based in part on a belief that Bradney et al. elements need ESD protection, it is necessary to identify those elements and explain why the Bradney et al. apparatus supposedly would not already have such ESD protection. The Office Action does not identify any solid-state components, and it also does not explain why the ESD protection of them supposedly was insufficient, so the statement of supposed benefits is insufficient to justify the rejection.

Therefore, although the Office Action provides numerous statements asserting that it would have been obvious to modify the Bradney et al. fingerprint recognizing apparatus to

benefit from advantages, appellants have explained above why each of the **purported** advantages have not been shown to be applicable to the Bradney et al. fingerprint recognizing apparatus. For this reason alone, the modification has not been shown to be obvious, and the rejection should be reversed for at least the reason of not fulfilling the MPEP requirement that there must be some suggestion or motivation to modify the reference or to combine reference teachings.

# The following argument applies to claims 1, 2, 7, 8, and 14 separately from the prior group:

Appellants provide an additional and independent reason why the rejection of some of the claims should be reversed for not complying with the MPEP: MPEP § 2143 requires that the modified prior art teach or suggest all claim limitations, and if the prior art technology were modified as described in the Office Action, this requirement would not be fulfilled. Appellants elaborate as follows:

In addition to reciting a "contact section being electrically connected to the ground," claims 1, 2, 7, 8, and 14 also recite that:

the contact section is a separate element from the cover.

As indicated above, the rejection relies on the Bradney et al. flip-top cover 86 to teach the "cover" and on the area of the Bradney et al. membrane 58 to teach the "contact section" (see Bradney et al.'s Figs. 4a and 5a). It is acknowledged (Office Action, page 6, paragraph 16) that the area of the Bradney et al. membrane 58 is not connected to ground as claimed. Therefore, the rejection relies on Setlak et al. to suggest connecting the "contact section" to ground.

Setlak et al. discloses an embodiment of a fingerprint sensor without a cover in Fig. 2 and an embodiment with a cover in Fig. 4. In the first embodiment, electrode 53 is connected to

ground though an unlabeled resistor. In the other embodiment, electrically conductive cover 53' is connected to ground through charge bleed resistor 104. The rejection relies on the Bradney et al. embodiment depicted in Figs. 4a and 5a, and this embodiment has flip-top cover 86. Therefore, appellants submit that, if someone skilled in the art were to modify the Bradney et al. fingerprint recognizing apparatus of Figs. 4a and 5a according to the Setlak et al. disclosure, that person would naturally rely on the Setlak et al. embodiment of Fig. 4 to obtain a modified fingerprint recognizing apparatus that had a cover. It would be counterintuitive to rely on the embodiment of Fig. 2, having no cover, instead.

As noted, in the Setlak et al. embodiment of Fig. 4, cover 53' is connected to ground. However, each of claims 1, 2, 7, 8, and 14 recite that "the contact section is a separate element from the cover," and the claims require that the "contact section" is connected to ground. Because cover 53', the element disclosed as connected to ground, cannot be a separate element from itself, the modified Bradney et al. fingerprint recognizing apparatus would not have all claim limitations as required by MPEP § 2143. For this additional reason, the rejection of claims 1, 2, 7, 8, and 14 should be reversed.

Appellants provided these arguments in their Request for Reconsideration of April 22, 2005, but the Examiner maintained the rejection. The reasons for maintaining the rejection are provided in the Advisory Action dated June 22, 2005. Appellants explain as follows why those reasons do not justify maintaining the rejection:

In the second paragraph on page 2 of the Advisory Action, the Examiner cites Setlak et al., column 1, lines 20-48, as supposedly stating that a capacitive-type fingerprint sensor is superior to optical-type fingerprint sensors. However, the cited text only discusses optical-type

fingerprint sensors (and their problems). It does not mention capacitive-type fingerprint sensors nor does it state that such sensors are superior.

The Examiner then cites column 2, lines 45-49, and column 1, lines 36-48, of Setlak et al. as justifying his contention that implementing an "inexpensive, robust, and energy efficient" capacitive-type fingerprint sensor in a system originally having an optical-type fingerprint sensor would have been obvious. However, the cited text is more supportive of a *general* argument that it would have been obvious to modify the Bradney et al. system in view of the Setlak et al. disclosure, and a statement of general advantages is not a statement that it would have been advantageous to *selectively* add to the Bradney et al. system the specific elements from Setlak et al. that would produce an apparatus having every element recited in the claims.

On the bottom of page 3 of the Advisory Action, the Examiner cites column 7, lines 20-24, of Bradney et al. as supporting his rejection. Specifically, he writes that Bradney et al. does not teach away from his modification. However, a rejection cannot be supported by an argument that a prior art statement does not teach away from a modification. The Examiner has the burden to provide a teaching (or suggestion) *in favor of* a modification.

The cited text (column 7, lines 20-24, of Bradney et al.) reads as follows:

... facilities to banks and merchants. Certain hardware systems components, such as fingerprint scanners and card readers known in the art, may be adapted to be compatible with this system [emphasis added].

Perhaps, the Examiner thinks that the cited text shows that modification of the Bradney et al. system was envisioned by the patentee. However, reference to the preceding text (see lines 3-20) shows that the Examiner's cited text discloses instead that hardware, such as fingerprint scanners,

may be *added* to the existing disclosed system. This is not a statement of replacing the disclosed fingerprint sensor in the system with a different fingerprint sensor. Also, the recitation "fingerprint *scanners*" describes hardware, which *records* fingerprint data for later use in identity verification, as opposed to fingerprint *sensors*, which obtain data for comparison with the recorded data *during* identity verification.

Thus, appellants submit that the Advisory Action does not provide sufficient justification for maintaining the rejection.

### The following argument applies to claims 3 and 9-11 separately from the prior groups:

In addition to the reasons provided above for reversing the rejection of claims 3 and 9-11, appellants note here that these claims also recite that:

the contact section is arranged in a recess.

The Office Action does not properly explain how the asserted prior art supposedly teaches or suggests this feature in the context of the rejected claims.

As noted above, the rejection relies on the area of membrane 58 of Bradney et al. (see, e.g., Figs. 4 and 4a) to teach the "contact section." Membrane 58 covers scan window 56, which Bradney et al. discloses is "preferably" located in a raised portion 62. (Column 5, line 59, to column 6, line 2.) A teaching of a raised portion cannot anticipate a "recess." Also, although Bradney et al. only discloses that a raised portion is preferable, the Office Action does not indicate any teaching that this area might be arranged in a recess as claimed. Therefore, the rejection has not been justified for this additional reason.

Appellants provided this argument in the Request for Reconsideration of April 22, 2005, and the Examiner maintained the rejection. However, the reasons for maintaining the rejection

provided in the Advisory Action do not address the above argument. Instead, the Examiner merely cites Figs. 3, 4, and 4a of Bradney et al.

However, as appellants noted repeatedly in the past, the Examiner does not adequately indicate in his modification of the prior art which elements of the Bradney et al. fingerprint recognizing apparatus would be removed and which elements of the Setlak et al. apparatus would be added.<sup>3</sup> If the Examiner relies on a modification in which the entire Bradney et al. fingerprint sensor is replaced by that of Setlak et al., any suggested recess (that is, *if* any) in Bradney et al.'s Fig. 4a would be absent. The Examiner cites no disclosure in Setlak et al. of placing an optical-type fingerprint sensor in a recess, and it is not even clear that a curved surface of such a sensor (analogous to the curved sensor surface in Bradney et al.) could be designed without undue experimentation to operate properly.

Thus, appellants submit that the Advisory Action does not provide sufficient justification for maintaining the rejection.

\* \* \*

In summary, because of the lack of a proper reason to combine the teachings of the two prior art references, the rejection of claims 1-5, 7-11, 13, and 14 should be reversed. In view of the lack of a proper teaching or suggestion of a "contact section being electrically connected to the ground" such that "the contact section is a separate element from the cover," the rejection of claims 1, 2, 7, 8, and 14 should be reversed for this additional reason. In view of the lack of a

<sup>&</sup>lt;sup>3</sup> See, for example, appellants' submission of July 30, 2004, sentence bridging pages 12-14. Although the Examiner provides some elaboration in the January 25, 2005 Office Action, he still omits explicit details regarding the flip-top cover housing and the contact section. See the discussion in appellants' submission of April 22, 2005, page 2, second full paragraph.

proper teaching or suggestions that "the contact section is arranged in a recess," the rejection of claims 3 and 9-11 should be reversed for this additional reason.

B. The rejection of claims 6 and 12 under 35 U.S.C. § 103(a) as obvious over Bradney et al. in view of Setlak et al., and further in view of Gainey (U.S. Pat. No. 6,382,416) should be reversed.

The rejection of claims 6 and 12 is based in part on the rejection of parent claims 1 and 7, respectively, over Bradney et al. in view of Setlak et al. Above, appellants discuss explain why the rejection of claims 1 and 7 should be reversed. For at least this reason, the rejection of dependent claims 6 and 12 should also be reversed.

C. The rejection of claim 15 under 35 U.S.C. § 103(a) as obvious over Holehan (U.S. Pat. No. 6,337,918) in view of Setlak et al. should be reversed.

Holehan discloses a personal computer with a touchpad 16. (Fig. 1.) The touchpad obtains information for fingerprint analysis. (Column 4, lines 32-40.) Specifically, touchpad 16 includes an infrared source/detector 19 that includes a plurality of infrared sources 20 and an infrared detector 24. (Column 3, lines 31-33.) That is, Holehan discloses an information processing unit that uses an *optical* fingerprint sensor.

Claim 15 describes an information processing unit having a contact section and a unit casing, and the claim specifies that:

the contact section [is] electrically connected to the ground of the unit casing.

The rejection relies on Holehan to teach an information processing unit as claimed, with glass 22 of touchpad 16 (and its upper surface 21) to teach the claimed "contact section," except that, as acknowledged in the Office Action, Holehan does not teach a "contact section" electrically connected to ground as claimed. The rejection relies instead on Setlak et al. to suggest modifying the Holehan information processing unit to have a contact section electrically connected to ground.

As motivation for this modification, the rejection relies on statements in Setlak et al., column 6, lines 55-58, regarding power consumption and ESD protection. However, as explained above, this quotation from Setlak et al. is not a comparison of the Setlak et al. electric field fingerprint sensor with prior art optical fingerprint sensors. Therefore, the Setlak et al. quotation would not motivate a person to modify the Holehan information processing unit as described in the Office Action. Thus, the obviousness rejection has not been justified.

Appellants provided this argument in their Request for Reconsideration of April 22, 2005, but the Examiner maintained the rejection. However, the only statement provided in the Advisory Action regarding claim 15 is a cursory statement on page 4 referencing Bradney et al., and Bradney et al. is not asserted against claim 15. In other words, the Examiner did not respond to appellants' argument regarding claim 15.

Accordingly, the rejection of claim 15 should be reversed.

#### VIII. CONCLUSION

For the above reasons, appellants request that the Board of Patent Appeals and Interferences reverse the Examiner's rejections of claims 1-15.

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If this paper is not timely filed, appellants petition for an extension of time. The fee for

any such extension may be charged to our Deposit Account No. 50-2866, along with any other

additional fees, which may be due.

Respectfully submitted,

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Enclosures:

Claims appendix

Evidence appendix

Related proceedings appendix

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### **CLAIMS APPENDIX**

Claim 1 (previously presented): A fingerprint recognizing apparatus comprising:

a sensor section mounted on the apparatus body for detecting a fingerprint of an operator;

a cover movable between an open position and a closed position for protecting the sensor

section in such a manner that an operator's finger can access the sensor section when the cover is

in the open position; and

a contact section arranged on the apparatus body at a position where the operator's finger

can easily come into contact therewith during an operator's action to open the cover, the contact

section being electrically connected to the ground of the apparatus body,

wherein the contact section is a separate element from the cover.

Claim 2 (original): A fingerprint recognizing apparatus, as set forth in claim 1, wherein

the cover has one free end and another base end and is moved between the open and closed

positions by means of a hinge provided at the base end of the cover.

Claim 3 (previously presented): A fingerprint recognizing apparatus comprising:

a sensor section mounted on the apparatus body for detecting a fingerprint of an operator;

a cover movable between an open position and a closed position for protecting the sensor

section in such a manner that an operator's finger can access the sensor section when the cover is

in the open position; and

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a contact section arranged on the apparatus body at a position where the operator's finger can easily come into contact therewith during an operator's action to open the cover, the contact section being electrically connected to the ground of the apparatus body,

wherein the cover has one free end and another base end and is moved between the open and closed positions by means of a hinge provided at the base end of the cover, and

wherein the contact section is arranged in a recess which is provided on the apparatus body at a position near to the free end of the cover when it is in the closed position.

Claim 4 (previously presented): A fingerprint recognizing apparatus comprising:

a sensor section mounted on the apparatus body for detecting a fingerprint of an operator;

a cover movable between an open position and a closed position for protecting the sensor section in such a manner that an operator's finger can access the sensor section when the cover is in the open position; and

a contact section arranged on the apparatus body at a position where the operator's finger can easily come into contact therewith during an operator's action to open the cover, the contact section being electrically connected to the ground of the apparatus body,

wherein the cover has one free end and another base end and is moved between the open and closed positions by means of a hinge provided at the base end of the cover, and wherein the free end of the cover is gently curved in such a manner that a central portion thereof is protruded outwardly more than respective side portions thereof.

Claim 5 (original): A fingerprint recognizing apparatus, as set forth in claim 4, wherein the recess and the contact section are also curved along with a curvature profile of the recess.

Claim 6 (original): A fingerprint recognizing apparatus, as set forth in claim 1, further comprising a locking means for locking the cover in its closed position, the locking means comprising a first engaging member provided at the free end of the cover and a second engaging member provided at a position corresponding to the first engaging member so that the first and second engaging members are mutually engaged with each other when the cover is in its closed position.

Claim 7 (previously presented): An electrical unit including a fingerprint recognizing apparatus, said unit comprising:

a unit casing;

the fingerprint recognizing apparatus mounted on the unit casing for detecting a fingerprint of an operator, the apparatus comprising:

a sensor section;

a cover movable between an open position and a closed position for protecting the sensor section; and

a contact section arranged at a position on the unit casing where an operator's finger can easily come into contact therewith when the cover is opened by the operator, the contact section being electrically connected to the ground of the unit casing,

wherein the contact section is a separate element from the cover.

Claim 8 (original): An electrical unit, as set forth in claim 7, wherein the cover has one free end and another base end and is moved between the open and closed positions by means of a hinge provided at the base end of the cover.

Claim 9 (previously presented): An electrical unit including a fingerprint recognizing apparatus, said unit comprising:

a unit casing;

the fingerprint recognizing apparatus mounted on the unit casing for detecting a fingerprint of an operator, the apparatus comprising:

a sensor section;

a cover movable between an open position and a closed position for protecting the sensor section; and

a contact section arranged at a position on the unit casing where an operator's finger can easily come into contact therewith when the cover is opened by the operator, the contact section being electrically connected to the ground of the unit casing,

wherein the cover has one free end and another base end and is moved between the open and closed positions by means of a hinge provided at the base end of the cover, and

wherein the contact section is arranged in a recess which is provided on the unit casing at a position near to the free end of the cover when it is in the closed position.

Claim 10 (original): An electrical unit as set forth in claim 9, wherein the free end of the cover is gently curved in such a manner that a central portion thereof is protruded outwardly more than respective side portions thereof.

Claim 11 (original): An electrical unit, as set forth in claim 10, wherein the recess and the contact section are also gently curved along with a curvature profile of the recess.

Claim 12 (original): An electrical unit, as set forth in claim 7, wherein the fingerprint recognizing apparatus further comprises a locking means for locking the cover in its closed position, the locking means comprising a first engaging member provided at the free end of the cover and a second engaging member provided at a position corresponding to the first engaging member so that the first and second engaging members are mutually engaged with each other when the cover is in its closed position.

Claim 13 (previously amended): An electrical unit including a fingerprint recognizing apparatus, said unit comprising:

a unit casing;

the fingerprint recognizing apparatus mounted on the unit casing for detecting a fingerprint of an operator, the apparatus comprising:

a sensor section;

a cover movable between an open position and a closed position for protecting the sensor section; and

a contact section arranged at a position on the unit casing where an operator's finger can easily come into contact therewith when the cover is opened by the operator, the contact section being electrically connected to the ground of the unit casing, and

a ground contact plate which is rigidly connected to the unit casing, the contact section is formed as a part of the ground plate.

Claim 14 (previously amended): An electrical unit, as set forth in claim 7 further comprising a mounting plate for rigidly securing the fingerprint recognizing apparatus to the unit casing by means of a screw.

Claim 15 (previously amended): An information processing unit including a fingerprint recognizing apparatus, said unit comprising:

a unit body comprising a data input section and a data processing section for processing data input from the data input section;

a display section for displaying letters and images; and

the fingerprint recognizing apparatus mounted on the unit casing for detecting a fingerprint of an operator, the apparatus comprising:

a sensor section;

a cover movable between an open position and a closed position for protecting the sensor section; and

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a contact section arranged at a position on the unit casing where an operator's finger can easily come into contact therewith when the cover is opened by the operator, the contact section electrically connected to the ground of the unit casing,

wherein the contact section is a separate element from the cover.

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### **EVIDENCE APPENDIX**

No evidence under 37 C.F.R. § 41.37(c)(1)(ix) is submitted.

# **RELATED PROCEEDING APPENDIX**

No decisions under 37 C.F.R. § 41.37(c)(1)(x) are rendered.